CLAIMS

What is claimed is:

1. A method of assigning service priorities to traffic from a plurality of sources using meters, the method comprising:

receiving a packet that is placed into a specific class of service (COS) group;

determining a fabric-adjusted meter modifier depending on technology of a limiting uplink being used; and

adding the fabric-adjusted meter modifier to a meter corresponding to the specific COS group.

2. The method of claim 1, wherein the fabric-adjusted meter modifier is also dependent on a payload size of the packet.

3. The method of claim 1, further comprising:

determining if the meter exceeds a black-type limit for the specific COS group; and

if the black-type limit is exceeded, then dropping the packet.

4. The method of claim 1, further comprising:

determining if the meter exceeds a red-type limit for the specific COS group; and

if the red-type limit is exceeded, then lowering a priority level of the packet.

5. The method of claim 1, further comprising:

determining if the COS meter exceeds limit Lm for the specific COS group and

if the limit Lm is exceeded then perform an action, Am, specified for limit Lm.

6. The method of claim 2, wherein determining the fabric-adjusted meter modifier comprises retrieving a modifier value associated with the payload size from a technology-specific look-up table.

7. The method of claim 2, wherein determining the fabric-adjusted meter modifier comprises summing outputs from a plurality of comparators

8. The method of claim 2, wherein determining the fabric-adjusted meter modifier comprises summing outputs from a plurality of comparators with the payload size if specified by a user configurable flag.

9. An apparatus for forwarding traffic from a plurality of sources, the apparatus comprising:
a port for receiving a packet that is placed into a specific COS group;
calculation circuitry configured to determine a fabric-adjusted meter modifier depending on a technology of an uplink being used;
update circuitry configured to add the fabric-adjusted meter modifier to a meter corresponding to the specific COS group.

10. The apparatus of claim 9, wherein the fabric-adjusted meter modifier is also dependent on a payload size of the packet.

11. The apparatus of claim 9, further comprising:
comparison circuitry configured to determine if the meter exceeds a black-type limit for the specific COS group; and
non-forwarding circuitry for dropping the packet if the black-type limit is exceeded.

12. The apparatus of claim 9, further comprising:
comparison circuitry configured to determine if the meter exceeds a red-type limit for the specific COS group; and
prioritization circuitry for lowering a priority level of the packet if the red-type limit is exceeded.

13. The apparatus of claim 7, wherein the calculation circuitry comprises a technology-specific look-up table.

14. The apparatus of claim 7, wherein the calculation circuitry comprises a plurality of comparators and an adder to sum outputs of the comparators.

15. A system for routing traffic from a plurality of sources using class of service (COS) meters, the system comprising:
means for receiving a packet that is placed into a specific COS group;
means for determining a fabric-adjusted meter modifier depending on a technology of an uplink being used;
means for adding the fabric-adjusted meter modifier to a COS meter corresponding to the specific COS group.

16. A method of implementing class of service (COS) functionality in a telecommunications system, the method comprising:
defining a user-configurable function by way of a user interface; and
assigning the user-configurable function to be a meter modifier function associated with a class of service group in the system.

17. The method of claim 16, wherein the user-configurable function depends on a payload size.

18. The method of claim 16, wherein the user-configurable function depends on a current value of the meter.

19. The method of claim 16, wherein the user-configurable function depends on a last destination of a packet forwarded by the system.

20. The method of claim 16, wherein the meter function is used to adjust for a fabric uplink technology.

21. A method of implementing class of service (COS) functionality in a telecommunications system, the method comprising:

defining multiple user-configurable meter modifier functions by way of a user interface; and

assigning each service class of a set of service classes to one of the user-configurable meter modifier functions.